



PATENT APPLICATION

IN THE U.S. PATENT AND TRADEMARK OFFICE

Appellants: Norbert BECKER et al. Conf.: 7826  
Appl. No.: 09/936,047 Group: 2162  
Filed: February 13, 2002 Examiner: Cam Y. T. TRUONG  
For: AUTOMATION SYSTEM WITH AUTOMATION OBJECTS  
WITHA DIRECTORY STRUCTURE AND METHOD FOR THE  
MANAGEMENT OF AUTOMATION OBJECTS IN A  
DIRECTORY STRUCTURE

Docket No.: 32860-000171/US

**APPELLANTS' BRIEF ON APPEAL UNDER 37 CFR §41.37**

December 6, 2006

United States Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314  
**Mail Stop Appeal Brief - Patents**

Sir:

In accordance with the provisions of 37 CFR §41.37, Appellants submit the following:

**I. REAL PARTY IN INTEREST:**

The real party in interest in this appeal is Siemens Aktiengesellschaft. Assignment of the application was submitted to the US Patent and Trademark Office on January 17, 2003, and recorded on the same date at Reel 013366, Frame 0039.

**II. RELATED APPEALS AND INTERFERENCES:**

There are no known appeals or interferences that will affect, be directly affected by, or have a bearing on the Board's decision in this Appeal.

12/07/2006 09:00:00 AM 00000000

00 00:00:00

000000 00

**III. STATUS OF CLAIMS:**

Claims 1-16 are pending in the application, with claims 1 and 9 being written in independent form. Claims 17 and 18 were canceled via the July 27, 2005 Amendment.

Claims 1-16 remain finally rejected. Claims 1-16 on appeal are set forth in the attached Claims Appendix.

**IV. STATUS OF AMENDMENTS:**

No amendments were requested subsequent to the June 6, 2006 final Office Action.

**V. SUMMARY OF CLAIMED SUBJECT MATTER:**

Independent claims 1 and 9 are directed to an automation system for creating an automation solution.

**A. Claim 1:**

Claim 1 recites that the automation system includes a plurality of automation objects, which represent or realize partial automation solutions.<sup>1</sup> As shown in Fig. 1, a directory V may store object names O1-On of the automation objects, and each of the object names O1-On may be assigned a directory entry OE1-OEn.<sup>2</sup> Each directory entry (e.g., OE1) may contain first information data O11 as an automation object reference, second information data O12 as a list of the modules (describing the technological functionality) contained in the automation object, and third information data (O13) describing an interface of the automation object.<sup>3</sup>

The automation objects, once created and entered into the directory V, may be viewed by users and/or tools.<sup>4</sup> By virtue of the directory structure, which is somewhat analogous to a

---

<sup>1</sup> Spec., [0008] and [0015].

<sup>2</sup> Spec., [0010].

<sup>3</sup> Id.

<sup>4</sup> Spec., [0012].

telephone book, a plurality of users may access (and work on) the partial solutions (or objects) to allow parallel working to create the automation solution, as depicted in Fig. 2.<sup>5</sup>

**B. Claim 9:**

Claim 9 is directed to an automation system, which is somewhat similar to the one described above with respect to claim 1. However, claim 9 recites a “memory” for entering and storing object names ... as directory entries in a directory.

**VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL:**

Appellants seek the Board’s review of the rejection of claims 1-16 under 35 USC §103(a) as being obvious over US 5,974,572 to Weinberg et al. (“Weinberg”) in view of US 5,987,242 to Bentley et al. (“Bentley”).

**VII. ARGUMENTS:**

**A. The Obviousness Rejection:**

**i. Independent Claims 1 and 9:**

Independent claims 1 and 9 recite (among other things): a plurality of automation objects “which are to be created and worked on,” a directory (or memory) for “entering and storing” object names of automation objects when created, and that the automation object is to be worked on by a plurality of users “in parallel to create the automation solution.” At least these features (as recited in independent claims 1 and 9), in combination with the other features recited in independent claims 1 and 9, are not taught or suggested by the prior art relied upon by the Examiner.

The Examiner relies heavily upon the Weinberg reference to teach all of the features defined by independent claim 1, except for an automation object that can be worked on by a number of users in parallel, and therefore looks to the Bentley reference to allegedly teach this feature.<sup>6</sup> This rejection position is not convincing because the Examiner’s heavy reliance upon the Weinberg reference is misplaced.

---

<sup>5</sup> Spec., [0008].

<sup>6</sup> June 6, 2006 Office Action, p. 7, lines 8+.

### **The Weinberg Reference**

Weinberg discloses an Astra program for facilitating the analysis, management and load testing of web sites. With reference to Fig. 8, the Astra program includes a plurality of objects categorized into six object classes, inclusive of an Astra Object 94, a Site Graph Object 114, an Edges Object 119, an Edge Object 116, a Nodes Object 118, and a Node Object 115.<sup>7</sup> The Astra Object 94 may access and manipulate data stored by the Site Graph Object 114, and each Site Graph Object 114 may correspond generally to a map of a web site.<sup>8</sup> The site-specific data stored by the Site Graph Object 114 may be contained within and managed by the Edges, Edge, and Node Objects, which are subclasses of the Site Graph Object 114.<sup>9</sup> Each Node Object 115 may represent a respective node (URL) of the site map, and each Edge Object 116 may represent a respective link between two URL's (nodes) of the map.<sup>10</sup> Associated with each Node Object and each Edge Object is a set of attributes including display attributes which specify how the respective object is to be represented graphically within the site map.<sup>11</sup> For example, each Node Object and each Edge Object may include respective attributes for specifying the color, visibility, size, screen position, and an annotation for the display of the object.<sup>12</sup> Thus, the objects depicted in Fig. 8 realize partial solutions (in the broadest sense of the term) to the extent that they generate a graphical map of a web site.

### **Weinberg's Object are not "Created and Worked On"**

Even if the graphical map of the web site were comparable to the claimed "automation solution," then the rejection would still fail because Weinberg's system does *not* create and work on the objects to create the automation solution. Indeed, Figs. 2-6 and the corresponding description of Weinberg do not show or describe the objects, but instead relate to the automation solution (i.e., the graphical map of a web site). Thus, the object names

---

<sup>7</sup> Weinberg, col. 19, lines 1-5.

<sup>8</sup> Weinberg, col. 19, lines 7+.

<sup>9</sup> Id.

<sup>10</sup> Id.

<sup>11</sup> Id.

<sup>12</sup> Weinberg, col. 19, lines 21-24.

allocated to the objects and information data with respect to references in the form of URL's (addresses) and interfaces in the form of links disclosed by Weinberg do not refer to the objects themselves, but to the web sites scanned by the Astra system.

In summary, even if Weinberg taught that the Astra system includes objects, the reference does not teach or suggest that the objects themselves may be viewed, requested or worked on. Instead, the output created by the Astra system (i.e., the graphical map of a web site) may be viewed, requested or worked on.

**The Examiner's Counter Arguments are not Valid**

Not persuaded, the Examiner counters that users can utilize a "Dynamic Scan" feature of Astra to append dynamically generated web pages to their maps, and that the above information shows that web sites are created and worked on to create web pages.<sup>13</sup> Thus, the Examiner seems to respectively compare Weinberg's web sites and web pages to the claimed "automation objects" and "automation solution" defined by independent claims 1 and 9. Appellants disagree.

Weinberg's web sites are not comparable to the claimed "automation objects." This is because a web site is a collection of web pages. Certainly then, a web site does *not* realize a partial web page. In this regard, the Examiner position seems inconsistent on its face. Furthermore, contrary to the Examiner's allegations, Weinberg's web sites can not be created and worked on within the Astra system. The Astra system only scans the web sites to create a graphical site map, and it is this graphical site map that can be worked on.

**Weinberg's System does not Include a Directory**

As noted above, and with reference to Fig. 8 of Weinberg, the Astra system includes a plurality of objects inclusive of a Site Graph Object 114, which corresponds generally to the map of a web site. Weinberg does not, however, teach or suggest any directory for entering and storing names of the graphical site maps as the automation objects. Fig. 3 of Weinberg shows the created graphical map of a web site in which complex web structures and the interrelationship between the data entries of those structures are displayed in such a way that

---

<sup>13</sup> June 6, 2006 Office Action, p. 2, lines 12-20.

makes navigation for the user easier.<sup>14</sup> Information data with respect to references in the form of URL's (addresses) and interfaces in the form of links disclosed by Weinberg (as well as possibly further information data) do not refer to the graphical site maps as the automation objects but to the content of the web sites scanned by the Astra system.

**ii. Conclusion:**

As demonstrated above, the primary reference to Weinberg does not teach the features upon which the Examiner relies to reject the claims. Further, the secondary reference to Bently does not make up for the deficiencies of Weinberg. Therefore, even if combined in the manner suggested by the Examiner, the prior art would still not teach or suggest each and every feature of the invention defined by each of independent claims 1 and 9. Accordingly, Appellants request the Board to reverse the Examiner's obviousness rejection of claims 1-16.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By:



Ray Heflin, Reg. No. 41,060  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

DJD/HRH

---

<sup>14</sup> Weinberg, col. 8, lines 44+.

**CLAIMS APPENDIX**

**Claims 1-16 on Appeal:**

1. An automation system for creating an automation solution in automation technology, said system comprising:

a plurality of automation objects which are to be created and worked on, each automation object realizing a partial automation solution;

a directory for entering and storing object names of the automation objects when created;

directory entries assigned to the respective object names, each directory entry including first information data as a reference to the respective automation object, second information data as a description of technological functionality of the respective automation object and third information data as a description of an interface of the respective automation object;

wherein once entry into the directory has taken place, the respective automation object can be viewed by at least one of other users and tools, and

wherein the object name of the respective automation object can be used to request a reference to the respective automation object to be worked on by a number of users in parallel to create the automation solution in automation technology.

2. The automation system as claimed in claim 1, wherein each directory entry includes fourth information data for listing the names of subcomponents of the respective automation object.

3. The automation system as claimed in claim 1, wherein the automation system includes means for the automatic entry of an automation object into the directory.

4. The automation system as claimed in claim 1, wherein the automation system includes means for indicating that an automation object is no longer available and that a copy of the object is being created.

5. The automation system as claimed in claim 2, wherein the automation system includes means for the automatic entry of an automation object into the directory.

6. The automation system as claimed in claim 2, wherein the automation system includes means for indicating that an automation object is no longer available and that a copy of the object is being created.

7. The automation system as claimed in claim 3, wherein the automation system includes means for indicating that an automation object is no longer available and that a copy of the object is being created.

8. The automation system as claimed in claim 5, wherein the automation system includes means for indicating that an automation object is no longer available and that a copy of the object is being created.

9. An automation system for creating an automation solution in automation technology, said system comprising:

a plurality of automation objects which are to be created and worked on, each automation object realizing a partial automation solution;

a memory for entering and storing object names of the automation objects, when created, as directory entries in a directory, wherein each object name includes,

first information data as a reference to the respective automation object,

second information data as a description of technological functionality of the respective automation object, and

third information data as a description of an interface of the respective automation object,

wherein the respective automation object, when in the directory, is viewable by at least one of another user and a tool, and

wherein the object name of the respective automation object is usable to request a reference to the respective automation object to be worked on by a plurality of users in parallel to create the automation solution in automation technology.

10. The automation system as claimed in claim 9, wherein each directory entry includes fourth information data for listing the names of subcomponents of the respective automation object.

11. The automation system as claimed in claim 9, wherein the automation system further comprises means for the automatic entry of an automation object into the directory.

12. The automation system as claimed in claim 9, wherein the automation system further comprises means for indicating that an automation object is no longer available and that a copy of the object is being created.

13. The automation system as claimed in claim 10, wherein the automation system further comprises means for the automatic entry of an automation object into the directory.

14. The automation system as claimed in claim 10, wherein the automation system further comprises means for indicating that an automation object is no longer available and that a copy of the object is being created.

15. The automation system as claimed in claim 11, wherein the automation system further comprises means for indicating that an automation object is no longer available and that a copy of the object is being created.

16. The automation system as claimed in claim 13, wherein the automation system further comprises means for indicating that an automation object is no longer available and that a copy of the object is being created.

**EVIDENCE APPENDIX**

None.

Appeal Brief  
US Application No. 09/936,047  
Atty. Docket 32860-000171/US

**RELATED PROCEEDINGS APPENDIX**

None.



Please type a plus sign (+) inside this box → +

HDP/SB/21 based on PTO/SB/21 (08-00)

27W  
AF

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/936,047
Filing Date	February 13, 2002
Inventor(s)	Norbert BECKER et al.
Group Art Unit	2162
Examiner Name	Cam Y. T. Truong
Attorney Docket Number	32860-000171/US

### ENCLOSURES (check all that apply)

☒ Fee Transmittal Form

☒ Fee Attached

☐ Amendment

☐ After Final

☐ Affidavits/declaration(s)

☒ Extension of Time Request

☐ Express Abandonment Request

☐ Information Disclosure Statement

☐ Certified Copy of Priority Document(s)

☐ Response to Missing Parts/Incomplete Application

☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Assignment Papers  
(for an Application)

☐ Letter to the Official Draftsperson and  
\_\_\_\_ Sheets of Formal Drawing(s)

☐ Licensing-related Papers

☐ Petition

☐ Petition to Convert to a  
Provisional Application

☐ Power of Attorney, Revocation  
Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD, Number of CD(s) \_\_\_\_\_

☐ After Allowance Communication to Group

☐ LETTER SUBMITTING APPEAL  
BRIEF AND APPEAL BRIEF (w/clean  
version of pending claims)

☒ Appeal Communication to Group  
(Notice of Appeal, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☐ Other Enclosure(s)  
(please identify below):

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm  
or  
Individual name

Harness, Dickey & Pierce, P.L.C.

Attorney Name  
Ray Heflin

Reg. No.  
41,060

Signature

*Ray Heflin*

Date

December 6, 2006

# FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.151.

TOTAL AMOUNT OF PAYMENT (\$ 620

Complete if Known

Application Number 09/936,047  
Filing Date February 13, 2002  
First Named Inventor Norbert BECKER et al.  
Examiner Name Cam Y. T. Truong  
Art Unit 2162  
Attorney Docket No. 32860-000171/US

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number

08-0750

Deposit  
Account  
Name

Harness, Dickey & Pierce, PLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1011	300	2011	150	Utility filing fee	
1012	200	2012	100	Design filing fee	
1013	200	2013	100	Plant filing fee	
1014	300	2014	150	Reissue filing fee	
1005	200	2005	100	Provisional filing fee	
SUBTOTAL (1)					(\$ 0

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

			Extra Claims	Fee from below	Fee Paid
Total Claims	16	-20 **	= 0	X	= 0
Independent Claims	2	-3 **	= 0	X	= 0
Multiple Dependent					= 0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	** Reissue independent claims over original patent
1205	50	2205	25	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	120
1252	450	2252	225	Extension for reply within second month	
1253	1020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	500
1402	500	2402	250	Filing a brief in support of an appeal	
1403	1000	2403	500	Request for oral hearing	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1500	2453	750	Petition to revive - unintentional	
1501	1400	2501	700	Utility issue fee (or reissue)	
1502	800	2502	400	Design issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$620

### 4. SEARCH/EXAMINATION FEES

1111	500	2111	250	Utility Search Fee	
1112	100	2112	50	Design Search Fee	
1113	300	2113	150	Plant Search Fee	
1114	500	2114	250	Reissue Search Fee	
1311	200	2311	100	Utility Examination Fee	
1312	130	2312	65	Design Examination Fee	
1313	160	2313	80	Plant Examination Fee	
1314	600	2314	300	Reissue Examination Fee	

SUBTOTAL (4) (\$0

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type) Ray Heflin Registration No. (Attorney/Agent) 41,060 Telephone 703-668-8000  
Signature Ray Heflin Date December 6, 2006

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.